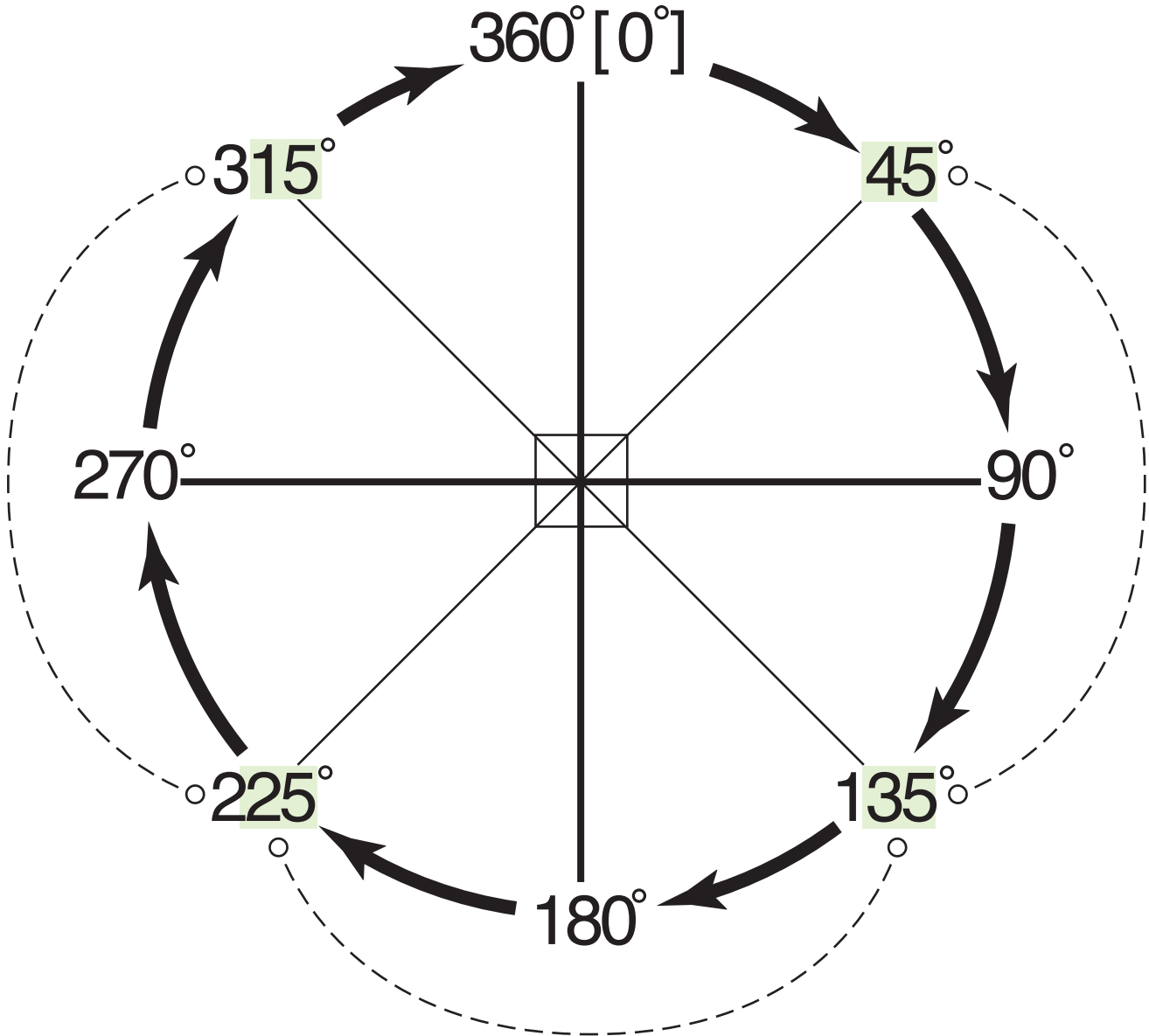


# Angles of a Circle

©2011 Joy A. Miller, FiveJs.com. For personal use only.



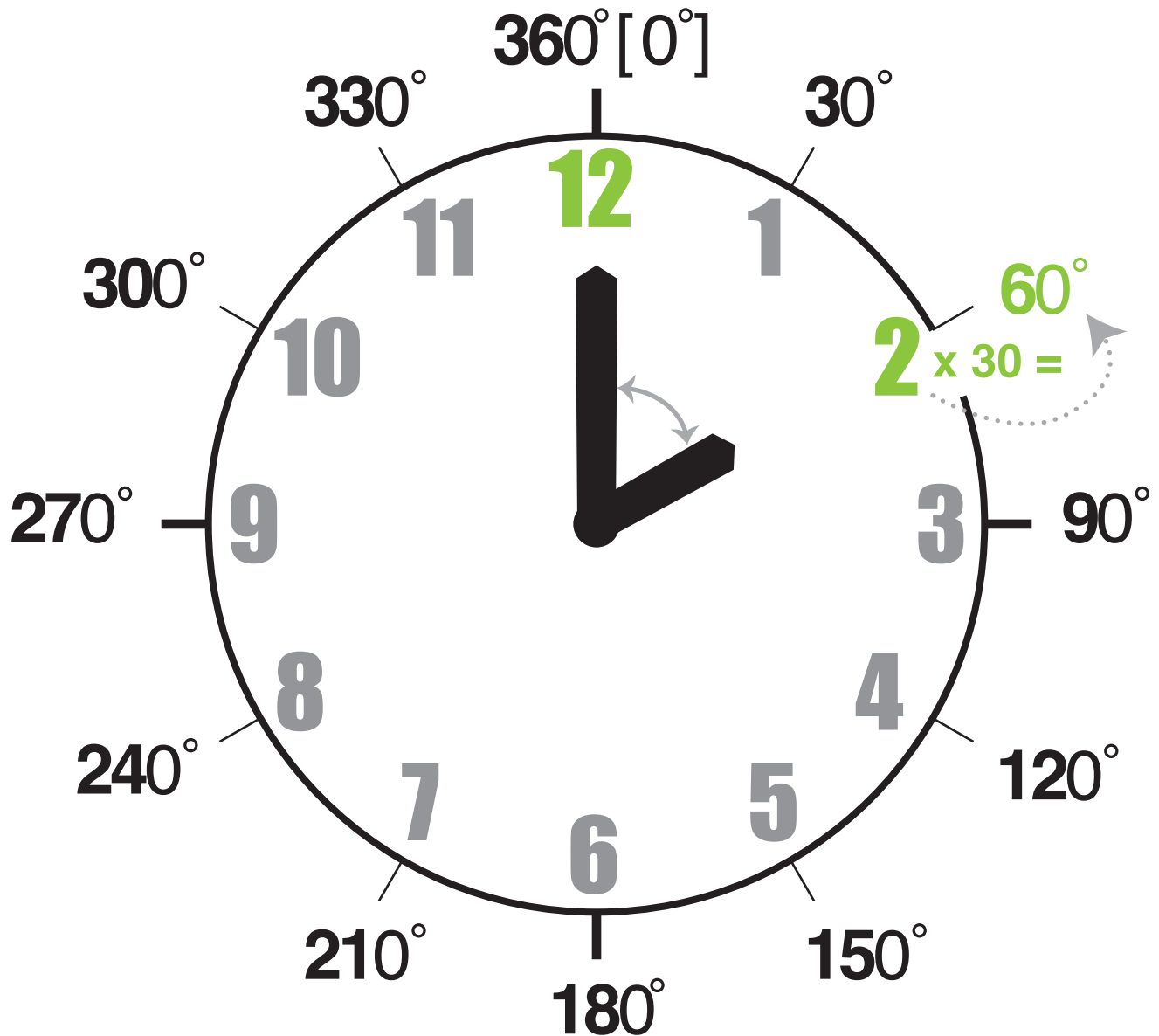
## Tips for Memory:

As you look at  $90^\circ$ ,  $180^\circ$ , and  $270^\circ$ , notice that they are multiples of 9. ( $9 \times 10 = 90$ ,  $9 \times 20 = 180$ ,  $9 \times 30 = 270$ ).

Notice as you move around the circle that the **green** numbers decrease by 10, while the numbers in the hundreds place increase by 1.

# Angles on a Clock

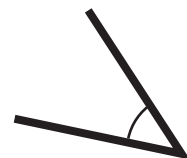
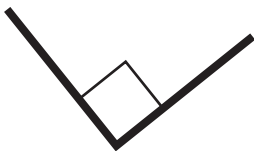
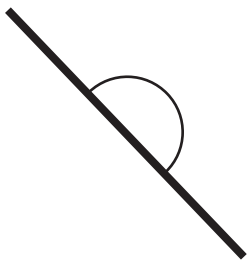
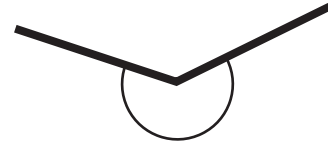
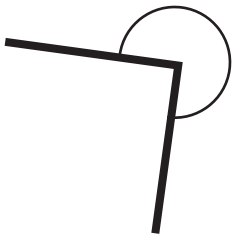
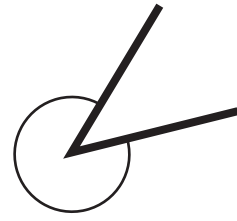
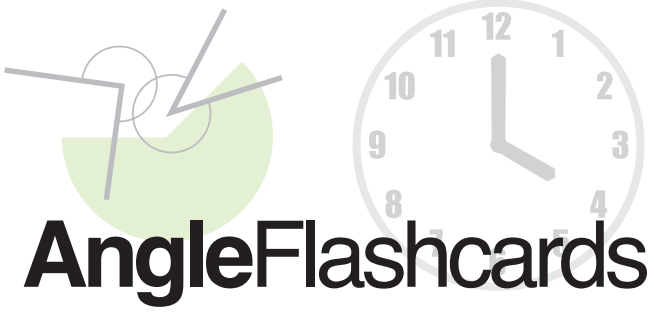
©2011 Joy A. Miller, FiveJs.com. For personal use only.

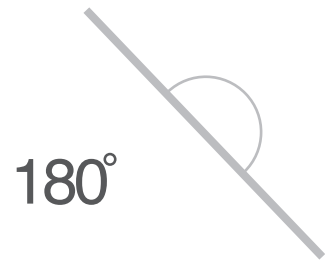


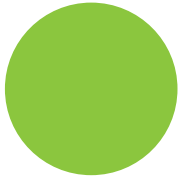
**Each time the minute hand moves from one number to the next, it has moved  $30^\circ$ .**

To estimate the measurement of an angle, imagine one line of the angle is pointing to the 12 on a clock. Then determine what number the other line would be pointing to, and multiply that number by 30. The answer is the measurement of that angle.

For example, on the clock above the minute hand is pointing to 12 and the hour hand is pointing to the 2. You would think  $2 \times 30 = 60$ , so the measurement of that angle is  $60^\circ$ .

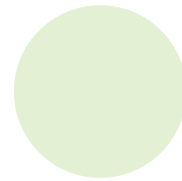








315°



360°



225°



270°



135°



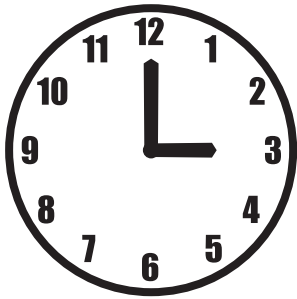
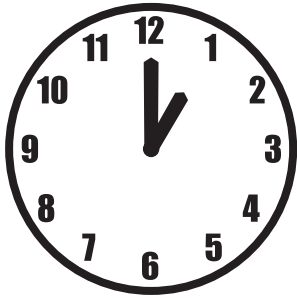
180°



45°

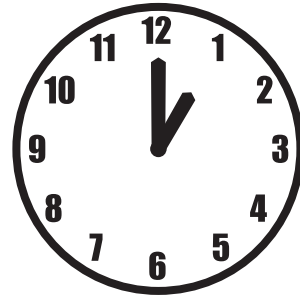


90°





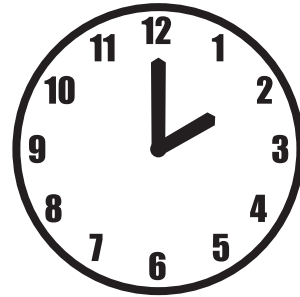
$30^\circ$



$30^\circ$



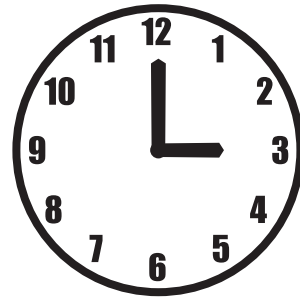
$60^\circ$



$60^\circ$



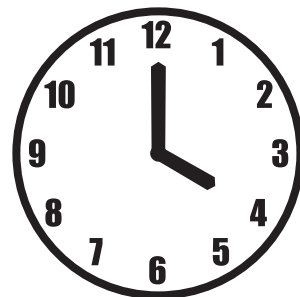
$90^\circ$



$90^\circ$

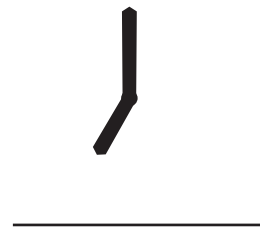
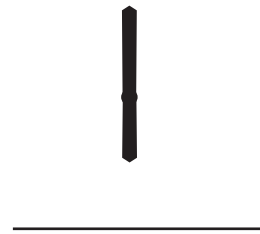
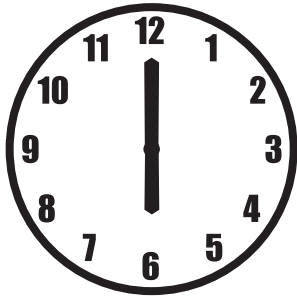
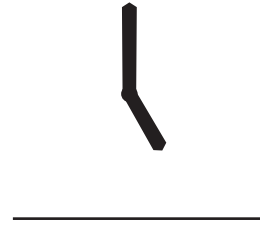
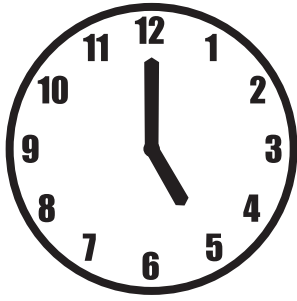


$120^\circ$

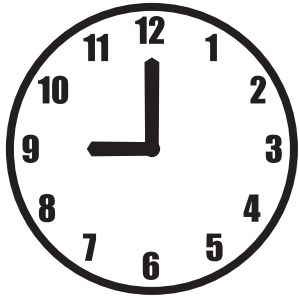


$120^\circ$



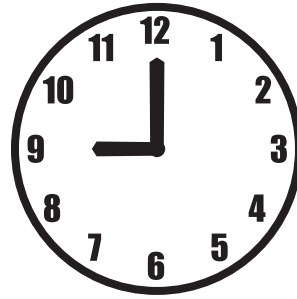








270°



270°



300°



300°



330°



330°

